



## QIBA and QI/ Imaging Biomarkers in the Literature

Articles are divided into two categories:

1. Articles that are generated by Quantitative Imaging Biomarkers Alliance (QIBA) research teams
2. Articles that reference QIBA

If available, links are provided to PubMed or journal landing pages.

### I. QIBA-GENERATED ARTICLES

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#### 2016

Rodriguez A, Chen-Mayer H, Fuld M, et al. **Harmonization of Dose Reduction Protocols Across Vendor Platforms for Measures of CT Density of the Lungs.** *American Thoracic Society International Conference Abstracts*. A79. 2016; A79. Lung Imaging: CT and Beyond: A2503-A2503. doi:10.1164/ajrccm-conference.2016.193.1\_MeetingAbstracts.A2503

Rodriguez A, Chen-Mayer H, Fuld M, et al. **The Effects of Iterative Reconstruction Techniques and High Resolution Kernels on Quantitative Computed Tomography (qCT).** *American Thoracic Society International Conference Abstracts*. A79. 2016; A79. Lung Imaging: CT and Beyond: A2502-A2502. doi:10.1164/ajrccm-conference.2016.193.1\_MeetingAbstracts.A2502

#### 2015

Sullivan DC, Obuchowski NA, Kessler LG, et al. **Metrology Standards for Quantitative Imaging Biomarkers.** *Radiology*. 2015 Aug 12. Epub ahead of print. doi: 10.1148/radiol.2015142202. [Link to article.](#)

Buckler AJ. **Inter-Method Performance Study of Tumor Volumetry Assessment on Computed Tomography Test-Retest Data.** *Academic Radiology*. Published online: September 13, 2015. <http://dx.doi.org/10.1016/j.acra.2015.08.007>

Deng Y, Rouze NC, Palmeri ML, Nightingale KR. **System-Dependent Sources of Uncertainty and Bias in Quantitative Shear-Wave Imaging.** *Ultrasonic Imaging and Tissue Characterization Symposium, Arlington, VA*. June 22 – 24, 2015. [Link to abstracts.](#)

Graham MM, Wahl RL, Hoffman JM, et al. **Summary of the UPICT protocol for 18F-FDG PET/CT Imaging in Oncology Clinical Trials.** *J Nucl Med*. 2015; 56(6):955-961. doi: 10.2967/jnumed.115.158402; PubMed Citation

Hall TJ, Palmeri M, Carson P, Milkowski, A, Chen S, Lynch T, et al. **Comparison of Shear-Wave Speed Estimates among Commercial Ultrasound Systems with Liver-Mimicking Phantoms.** *Ultrasonic Imaging and Tissue Characterization Symposium, Arlington, VA*. June 22 – 24, 2015. [Link to abstracts.](#)

Mulshine JL, Gierada DS, Armato SG 3<sup>rd</sup>, Avila RS, Yankelevitz DF, Kazerooni EA, McNitt-Gray MF, Buckler AJ, Sullivan DC. **Role of the Quantitative Imaging Biomarker Alliance in Optimizing CT for the Evaluation of Lung Cancer Screen-Detected Nodules.** *J Am Coll Radiol*. 2015 Apr; 12(4):390-5. doi: 10.1016/j.jacr.2014.12.003.

Pierce LA, Elston BF, Clunie DA, Nelson D, Kinahan PE. **A Digital Reference Object to Analyze Calculation Accuracy of PET Standardized Uptake Value.** *Radiology*. 2015 May 19. PMID: 25989387; doi: <http://dx.doi.org/10.1148/radiol.2015141262>

Quak E, Le Roux PY, Hofman MS, et al. **Harmonizing FDG PET Quantification while Maintaining Optimal Lesion Detection: Prospective Multicentre Validation in 517 Oncology Patients.** *Eur J Nucl Med Mol Imaging*. 2015 Jul 30. Epub ahead of print. PubMed Citation. [Link to article.](#)

Sullivan DC, Bresolin L, Seto B, Obuchowski NA, Raunig DL, Kessler LG. **Introduction to Metrology Series. Stat Methods Med Res.** 2015 Feb; 24(1):3 – 8. doi: 10.1177/0962280214537332. [PubMed Citation](#)

Huang EP, Wang XF, Choudhury KR, McShane LM, Gönen M, Ye J, Buckler AJ, Kinahan PE, Reeves AP, Jackson EF, Guimaraes AR, Zahlmann G. **Introduction to Metrology Series: Meta-Analysis of the Technical Performance of an Imaging Procedure: Guidelines and Statistical Methodology.** *Statistical Methods in Medical Research.* May 2014: pii: 0962280214537394 [Epub ahead of print] *first published online May 28, 2014.* doi: 10.1177/0962280214537394 [PubMed Citation](#)

Kessler LG, Barnhart HX, Buckler AJ, Choudhury KR, Kondratovich MV, Toledano A, Guimaraes AR, Filice R, Zhang Z, Sullivan DC. **Introduction to Metrology Series: The Emerging Science of Quantitative Imaging Biomarkers: Terminology and Definitions for Scientific Studies and Regulatory Submissions.** *Statistical Methods in Medical Research.* June 2014: pii: 0962280214537333. [Epub ahead of print] *first published online 11 June 2014.* doi: 10.1177/0962280214537333 [PubMed Citation](#)

Obuchowski NA, Reeves AP, Huang EP, Wang XF, Buckler AJ, Kim HJ, Barnhart HX, Jackson EF, Giger ML, Pennello G, Toledano AY, Kalpathy-Cramer J, Apanasovich TV, Kinahan PE, Myers KJ, Goldgof DB, Barboriak DP, Gillies RJ, Schwartz LH, Sullivan DC. **Introduction to Metrology Series: Quantitative Imaging Biomarkers: A Review of Statistical Methods for Computer Algorithm Comparisons.** *Statistical Methods in Medical Research.* June 2014: pii: 0962280214537390. [Epub ahead of print] *first published online June 11, 2014.* doi:10.1177/0962280214537390 [PubMed Citation](#)

Obuchowski NA, Barnhart HX, Buckler AJ, Pennello G, Wang XF, Kalpathy-Cramer J, Kim HJ, Reeves AP. **Introduction to Metrology Series: Statistical Issues in the Comparison of Quantitative Imaging Biomarker Algorithms using Pulmonary Nodule Volume as an Example.** *Statistical Methods in Medical Research.* June 11, 2014: pii: 0962280214537392. [Epub ahead of print] *first published online June 11, 2014.* doi:10.1177/0962280214537392 [PubMed Citation](#)

Raunig DL, Pennello G, Gatsonis C, McShane LM, Carson PL, Voyvodic JT, Wahl RL, Kurland BF, Schwarz AJ, Gönen M, Zahlmann G, Kondratovich M, O'Donnell K, Petrick N, Cole PE, Garra B, Sullivan DC. **Introduction to Metrology Series: Quantitative Imaging Biomarkers: A Review of Statistical Methods for Technical Performance Assessment.** *Statistical Methods in Medical Research.* June 2014: pii: 0962280214537344. [Epub ahead of print] *first published online June 11, 2014.* doi:10.1177/0962280214537344 [PubMed Citation](#)

## 2014

Huang W, Li X, Chen Y, Chang MC, et. al., **Variations of Dynamic Contrast-Enhanced Magnetic Resonance Imaging in Evaluation of Breast Cancer Therapy Response: A Multicenter Data Analysis Challenge.** *Translational Oncology,* 2014 Feb 1; 7(1):153-66. eCollection 2014. [PubMed Citation](#)

Kinahan PE, Wahl RL, Shao LX, Frank RA, Perlman ES. **Oncology: Basic, Translational & Therapy, MTA I: Technical Advances & Quantification Posters: The QIBA Profile for Quantitative FDG-PET/CT Oncology Imaging.** *J Nucl Med.* 2014; 55 (Supplement 1):1520.

Milkowski A, Hall TJ, Garra B, Nightingale K, Palmeri ML, Chen S, Carson PL. **Radiological Society of North America/Quantitative Imaging Biomarkers Alliance Ultrasound Shear Wave Speed Estimation in Elastic Phantoms: Sources and Magnitude of Variability in a Multicenter Study.** *American Institute of Ultrasound in Medicine Proceedings: J Ultrasound Med.* 2014; 33(suppl):S1–S124. [Link to conference proceedings paper](#)

Nightingale K, Palmeri ML, Deng Y, Rosenzweig S, Rouze N. **Shear Wave Speed Estimation in Calibrated Phantoms: Factors Affecting Bias.** *American Institute of Ultrasound in Medicine Proceedings: J Ultrasound Med.* 2014; 33(suppl):S1–S124, 2014. [Link to conference proceedings paper](#)

Oo JH, Leal J, Zhang J, Barrington S, Boellaard R, Eikman E, Wahl RL. **Instrumentation & Data Analysis, MTA II: Data Analysis & Management Posters: Multicenter quantitative assessment of treatment response by FDG PET/CT.** *J Nucl Med.* 2014; 55 (Supplement 1):2061.

Palmeri ML, et al. **A Comparison of 3-Dimensional In Vivo Acoustic Radiation Force Impulse Imaging With Multiparametric Magnetic Resonance Imaging for Prostate Cancer Diagnosis.** *American Institute of Ultrasound in Medicine Proceedings: J Ultrasound Med.* 2014; 33(suppl):S1–S124. [Link to conference proceedings paper](#)

Petrick N, Kim HJG, Clunie D, Borradaile K, Ford R, Zeng R, Gavrielides M, McNitt-Gray M, Lu ZQJ, Fenimore C, Zhao B, Buckler AJ. **Comparison of 1D, 2D, and 3D Nodule Sizing Methods by Radiologists for Spherical and Complex Nodules on Thoracic CT Phantom Images.** *Academic Radiology.* 2014; 21(1):30-40. doi: <http://dx.doi.org/10.1016/j.acra.2013.09.020>. [Link to Science Direct](#); [PubMed Citation](#)

Rodriguez A, Ranallo F, Judy PF, Gierada D, Fain SB. **Airway Measurement Accuracy For Low Dose Quantitative CT (qCT) Using Statistical (ASIR), And Model Based Reconstruction Techniques (Veo).** A108. *Lung Imaging: State of Play on Structure and Function.* May 1, 2014; A2395-A2395.

Rodriguez A; Ranallo FN; Judy PF; et. al, **CT Reconstruction Techniques for Improved Accuracy of Lung CT Airway Measurement,** *Med. Phys.* Nov 2014; 41(11): 111911. <http://dx.doi.org/10.1118/1.4898098>.

## 2013

Chen B, Barnhart H, Richard S, et al. **Volumetric Quantification of Lung Nodules in CT with Iterative Reconstruction (ASiR and MBIR).** *Med. Phys.* Nov 2013; 40 (11): 111902. [PubMed Citation](#); [Link to journal landing page](#)

Garra B, Hall TJ, Milkowski A, et al. **RSNA/QIBA: Shear Wave Speed as a Biomarker for Liver Fibrosis Staging.** *2013-IEEE International Ultrasonics Symposium (IUS), Joint IEEE-International Symposium on the Applications of Ferroelectrics (ISAF), and Piezoresponse Force Microscopy and Nanoscale Phenomena in Polar Materials (PFM), Joint IEEE-International Frequency Control Symposium (IFCS), and European Frequency and Time Forum (EFTF);* July 21 -25, 2013; Prague, Czech Republic. [Link to conference proceedings paper](#)

Gavrielides MA, Li Q, Zeng R, et al. **Minimum Detectable Change in Lung Nodule Volume in a Phantom CT Study.** *Academic Radiology.* 2013; 20 (11):1364-1370. doi: 10.1016/j.acra.2013.08.019. [PubMed Citation](#)

Sullivan DC, Schwartz LH, Zhao B. **The Imaging Viewpoint: How Imaging Affects Determination of Progression-Free Survival.** *Clin Cancer Res.* 2013; 19(10); 2621–8. doi: 10.1158/1078-0432.CCR-12-2936. [PubMed Citation](#)

Zacà D, Jovicich J, Nadar SR, Voyvodic JT, and Pillai JJ. **Cerebrovascular Reactivity Mapping in Patients with Low Grade Gliomas Undergoing Presurgical Sensorimotor Mapping with BOLD fMRI.** *J Magn Reson Imaging.* 2013; doi: 10.1002/jmri.24406. [Link to journal landing page](#)

## 2012

Chen B, Richard S, Barnhart H, Colsher J, Amurao M, Samei E. **Quantitative CT: Technique Dependency of Volume Assessment for Pulmonary Nodules.** *Physics in Medicine and Biology* 57: 1335–1348, 2012. [PubMed Citation](#)

Fenimore C, Lu ZJ, McNitt-Gray MF, Kim HJ, Clunie D, Gavrielides MA, Petrick N, Samei E, Chen B, Saiprasad G, Boedeker K, Chen-Mayer H, Buckler AJ, **Clinician Sizing of Synthetic Nodules to Evaluate CT Interscanner Effects.** *RSNA 2012.*

Voyvodic JT. **Reproducibility of Single-Subject fMRI Language Mapping with AMPLE Normalization.** *J Magn Reson Imaging.* Sept 2012; 36(3): 569–580. doi: 10.1002/jmri.23686; [PubMed Citation](#)

## 2011

Buckler AJ, et al. **Quantitative Imaging Test Approval and Biomarker Qualification: Interrelated but Distinct Activities.** *Radiology.* June 2011; 259(3):875-84. [Epub Feb 15, 2011]. [PubMed Citation](#)

Buckler AJ, Bresolin L, Dunnick NR, Sullivan DC; Group. **A Collaborative Enterprise for Multi-stakeholder Participation in the Advancement of Quantitative Imaging.** *Radiology.* March 2011; 258(3):906-14. [PubMed Citation](#)

Buckler AJ, Boellaard R. **Standardization of Quantitative Imaging: The Time is Right, and 18F-FDG PET/CT is a Good Place to Start.** *J Nucl Med.* Feb 2011; 52(2):171-2. [Epub Jan 13, 2011. No abstract.] [PubMed Citation](#)

McNitt-Gray MF, Kim HJ, Zhao B, Schwartz L, Clunie D, Borradaile K, Byrne K, Kaplan S, Barudin J, Sherman J, Slazak K, Petrick NP, Fenimore C, Lu J, Buckler, AJ, **Estimating the Minimum Detectable Change of Lung Lesions Using Patient Datasets Acquired Under a “No Change” Condition, RSNA 2011.**

Petrick NP, et al. **Comparison of 1D, 2D, and 3D Nodule Sizing Methods by Radiologists for Spherical and Complex Nodules on Thoracic CT Phantom Images.** *Academic Radiology*, Volume 21, Issue 1, 30 – 40.  
DOI: <http://dx.doi.org/10.1016/j.acra.2013.09.020>

## 2010

Buckler AJ, Mozley PD, Schwartz L, Petrick N, McNitt-Gray M, Fenimore C, O'Donnell K, Hayes W, Kim HJ, Clarke L, Sullivan D. **Volumetric CT in Lung Cancer: An Example for the Qualification of Imaging as a Biomarker.** *Acad Radiol.* Jan 2010; 17(1):107-15. [PubMed Citation](#)

Buckler AJ, Mulshine JL, Gottlieb R, Zhao B, Mozley PD, Schwartz L. **The Use of Volumetric CT as an Imaging Biomarker in Lung Cancer.** *Acad Radiol.* Jan 2010; 17(1):100-6. [PubMed Citation](#)

Buckler AJ, Schwartz LH, Petrick N, McNitt-Gray M, Zhao B, Fenimore C, Reeves AP, Mozley PD, Avila RS. **Data Sets for the Qualification of Volumetric CT as a Quantitative Imaging Biomarker in Lung Cancer.** *Opt Express.* July 5, 2010; 18(14):15267-82. [See also [http://vjbo.osa.org/virtual\\_issue.cfm](http://vjbo.osa.org/virtual_issue.cfm)]. [PubMed Citation](#)

Mozley PD, Schwartz LH, Bendtsen C, Zhao B, Petrick N, Buckler AJ. **Change in Lung Tumor Volume as a Biomarker of Treatment Response: A Critical Review of the Evidence.** *Ann Oncol.* Sept 2010; 21(9):1751-5. [Epub March 23, 2010, Review]. Free article. [PubMed Citation](#)

## 2009

Paldino MJ, Barboriak DP. **Fundamentals of Quantitative Dynamic Contrast-Enhanced MR Imaging.** *Magn Reson Imaging Clin N Am.* 2009; 17:277–289. [PubMed Citation](#)

## 2008

Frank R; FDG-PET/CT Working Group. **Quantitative Imaging Biomarkers Alliance FDG-PET/CT Working Group Report.** *Mol Imaging Biol.* Nov-Dec. 2008; 10(6):305. [PubMed Citation](#)

## II. ARTICLES THAT REFERENCE QIBA

### 2016

Amdouni E, Morvan Y, Gibaud B. **Towards an Imaging Biomarker Ontology Based on the Open Biological and Biomedical Ontologies Foundry.** *CEUR Workshop Proceedings, Vol-1546.* [Poster link.](#)

Aryal M, Chenevert T, Cao Y, et al. **Impact of Uncertainty in Longitudinal T1 Measurements on Quantification of Dynamic Contrast-Enhanced MRI.** *NMR in Biomedicine*, epub ahead of print, Jan 2016. [doi.org/10.1186/s12880-016-0109-0](http://doi.org/10.1186/s12880-016-0109-0)

Choi S, Jung S, Kim K, et al. **Perfusion MRI as the Predictive/Prognostic and pharmacodynamics Biomarkers in Recurrent Malignant Glioma Treated with Bevacizumab: a Systematic Review and a Time-to-Event Meta-Analysis.** *Journal of Neuro-Oncology*, epub Apr 2016.

Gavrielides M, Li Q, Zeng R, et al. **Volume Estimation of Multi-density Nodules with Thoracic Computed Tomography.** *Journal of Medical Imaging*, 3(1), 2016. [doi:10.1117/1.JMI.3.1.013504](http://doi.org/10.1117/1.JMI.3.1.013504)



- Gillies RJ, Kinahan PE, Hricak H. **Radiomics: Images Are More than Pictures, They Are Data.** *Radiology*. February 2016; 278:2, 563-577. DOI: <http://dx.doi.org/10.1148/radiol.2015151169>
- Hernando D, Sharma S, Aliyari G, et al. **Multi-site, Multi-vendor Validation of the Accuracy and Reproducibility of Proton-Density Fat-Fraction Quantification at 1.5T and 3T Using a Fat-Water Phantom.** *Magnetic Resonance in Medicine*. Epub Apr 2016.
- Herold CJ, Lewin JS, Wibmer AG, et al. **Imaging in the Age of Precision Medicine: Summary of the Proceedings of the 10<sup>th</sup> Biannual Symposium of the International Society for Strategic Studies in Radiology.** *Radiology*, 279(1), 2016. <http://dx.doi.org/10.1148/radiol.2015150709>
- Huh J, Choi Y, Woo D, et al. **Feasibility of test-bolus DCE-MRI using CAIPIRINHA-VIBE for the Evaluation of Pancreatic Malignancies.** *European Radiology*, epub ahead of print, Jan 2016. doi: [10.1007/s00330-016-4209-6](https://doi.org/10.1007/s00330-016-4209-6)
- Katrib A, Hsu W, Bui A, et al. **"Radiotranscriptomics": A Synergy of Imaging and Transcriptomics in Clinical Assessment.** *Quantitative Biology*, 4(1)1 – 12, 2016. <http://dx.doi.org/10.1007/s40484-016-0061-6>
- Kim B, Lee C, Seo N, et al. **Comparison of CAIPIRINHA-VIBE, Radial-VIBE, and Conventional VIBE Sequences for Dynamic Contrast-Enhanced (DCE) MRI: a Validation Study Using a DCE-MRI Phantom.** *Magnetic Resonance Imaging*. 2016 Jan. doi: [10.1016/j.mri.2015.11.011](https://doi.org/10.1016/j.mri.2015.11.011)
- Mehrtash A, Gupta S, Shanbhag D, et al. **Bolus Arrival Time and its Effect on Tissue Characterization with Dynamic Contrast-Enhanced Magnetic Resonance Imaging.** *Journal of Medical Imaging*, 3(2), 2016. doi: [10.1117/1.JMI.3.1.014503](https://doi.org/10.1117/1.JMI.3.1.014503)
- Messiou C, Bonvalot A, Gronchi A, et al. **Evaluation of Response after Pre-Operative Radiotherapy in Soft Tissue Sarcomas; the European Organisation for Research and Treatment of Cancer – Soft Tissue and Bone Sarcoma Group (EORTC – STBSG) and Imaging Group Recommendations for Radiological Examination and Reporting with an Emphasis on Magnetic Resonance Imaging.** *European Journal of Cancer*, 56, 37-44, Mar 2016. doi.org/[10.1186/s12880-016-0109-0](https://doi.org/10.1186/s12880-016-0109-0)
- O J, Lodge M, Wahl R. **Practical PERCIST: A Simplified Guide to PET Response Criteria in Solid Tumors 1.0.** *Radiology*, epub ahead of print, Feb 2016. <http://dx.doi.org/10.1148/radiol.2016142043>
- Obuchowski N, Buckler A, Kinahan P, et al. **Statistical Issues in Testing Conformance with the Quantitative Imaging Biomarkers Alliance (QIBA) Profile Claims.** *Academic Radiology*, 23(4), 2016. <http://dx.doi.org/10.1016/j.acra.2015.12.020>
- Pak K, Kim S. **What Do We Measure in Oncology PET?** *Nuclear Medicine and Molecular Imaging*, review - epub ahead of print, Apr 2016.
- Park J, Choi Y, Lee S, et al. **Assessment of Measurement Repeatability and Reliability with Virtual Touch Tissue Quantification Imaging in Cervical Lymphadenopathy.** *Journal of Ultrasound in Medicine*, Mar 2016.
- Robins M, Solomon J, Sahbaee P. **Development and Comparison of Projection and Image Space 3D Nodule Insertion Techniques.** Conference Proceedings: *SPIE*, 9783, Medical Imaging Apr 2016.
- Shin H, Kim M, Kim H, et al. **Comparison of Shear Wave Velocities on Ultrasound Elastography Between Different Machines, Transducers, and Acquisition Depths: a Phantom Study.** *European Radiology*, epub ahead of print, Jan 2016. doi: [10.1007/s00330-016-4212-y](https://doi.org/10.1007/s00330-016-4212-y)
- Sung Y, Park B, Choi Y, et al. **Dynamic Contrast-Enhanced MRI for Oncology Drug Development.** *Journal of Magnetic Resonance Imaging*, epub ahead of print, Feb 2016. doi.org/[10.1002/jmri.25173](https://doi.org/10.1002/jmri.25173)
- Tagliafico A, Tagliafico G. **Tomosynthesis and Breast Density.** *Digital Breast Tomosynthesis: A Practical Approach*. 29-44, 2016. doi.org/[10.1007/978-3-319-28631-0\\_3](https://doi.org/10.1007/978-3-319-28631-0_3)

van Es S, Venema C, Glaudemans A, et al. **Translation of New Molecular Imaging Approaches to the Clinical Setting: Bridging the Gap to Implementation.** *Journal of Nuclear Medicine*, 57(S1), 2016. doi: [10.2967/jnumed.115.157974](https://doi.org/10.2967/jnumed.115.157974)

Yankeelov T, Mankoff D, Schwartz L, et al. **Quantitative Imaging in Cancer Clinical Trials.** *Clinical Cancer Research*, 22(2), 284-290, 2016. doi:[10.1186/s12880-016-0109-0](https://doi.org/10.1186/s12880-016-0109-0)

Zöllner F, Daab M, Sourbron S, et al. **An Open Source Software for Analysis of Dynamic Contrast Enhanced Magnetic Resonance Images: UMM Perfusion Revisited.** *BMC Medical Imaging*, 16(1), 1-13, 2016. doi:[10.1186/s12880-016-0109-0](https://doi.org/10.1186/s12880-016-0109-0)

## 2015

Abramson RG, et al. **Methods and Challenges in Quantitative Imaging Biomarker Development.** *Acad Radiol*, 22(1), 25-32, 2015. doi: [10.1016/j.acra.2014.09.001](https://doi.org/10.1016/j.acra.2014.09.001).

Barr RG, Ferraioli G, Palmeri ML, et al. **Elastography Assessment of Liver Fibrosis: Society of Radiologists in Ultrasound Consensus Conference Statement.** *Radiology*. <http://pubs.rsna.org/doi/pdf/10.1148/radiol.2015150619>.

Beaumont H, et al. **Changes of Lung Tumour Volume on CT – Prediction of the Reliability of Assessments.** *Cancer Imaging*. 2015; 15(17). doi: [10.1186/s40644-015-0052-2](https://doi.org/10.1186/s40644-015-0052-2).

Betrouni N, Makni N, Lakroum, et al. **Computer-Aided Analysis of Prostate Multiparametric MR Images: an Unsupervised Fusion-Based Approach.** *International Journal of Computer Assisted Radiology and Surgery*. 2015, 1 – 12. Jun 2015; 36(3):166-169. Published online 2015 Jun 16 before print. doi:[10.1016/j.irbm.2015.01.015](https://doi.org/10.1016/j.irbm.2015.01.015). PubMed Citation [Journal link](#)

Betrouni N, Tartare G. **Prostate Atlas SimDCE: A Simulation Tool for Dynamic Contrast Enhanced Imaging of Prostate.** *IRBM* Volume 36, Issue 3, Pages 166-169 INSERM, U1189, 152, rue du Docteur Yersin, Lille University Hospital, 59120 Loos, France. Received 20 August 2014, Revised 26 January 2015, Accepted 26 January 2015, Available online 27 February 2015.

Beuzit L, Eliat P, Brun V, et al. **Dynamic Contrast-Enhanced MRI: Study of Inter-Software Accuracy and Reproducibility Using Simulated and Clinical Data.** *Journal of magnetic resonance imaging (JMRI)*. December 2015. doi:[10.1002/jmri.25101](https://doi.org/10.1002/jmri.25101)

Boellaard R. **The Engagement of FDG PET/CT Image Quality and Harmonized Quantification: from Competitive to Complementary.** *European Journal of Nuclear Medicine and Molecular Imaging*. 2015; 1 – 6. doi: [10.1007/s00259-015-3182-7](https://doi.org/10.1007/s00259-015-3182-7). PubMed Citation

Chang Z, Wang C. **Treatment Assessment of Radiotherapy Using MR Functional Quantitative Imaging.** *World Journal of Radiology*. 2015; 7(1):1-6. doi:[10.4329/wjr.v7.i1.1](https://doi.org/10.4329/wjr.v7.i1.1).

Drisis T, Metens T, Ignatiadis M, et al. **Quantitative DCE-MRI for Prediction of Pathological Complete Response Following Neoadjuvant Treatment for Locally Advanced Breast Cancer: the Impact of Breast Cancer Subtypes on the Diagnostic Accuracy.** *European Radiology*. 2015; Epub ahead of print. <http://dx.doi.org/10.1007/s00330-015-3948-0>

Ellingson BM, Bendszus M, Boxerman J, Erickson BJ, et al. **Consensus Recommendations for a Standardized Brain Tumor Imaging Protocol in Clinical Trials.** *Neurological Oncology*. 2015; epub ahead of print. PubMed Citation

Fransson S. **Validation and Robustness Analysis of Dynamic Contrast Enhanced MRI.** *Umea University – Master's Thesis*. Aug 2015. [Link to document](#)

Garra B. **Elastography: History, Principles, and Technique Comparison.** *Abdominal Imaging*. 2015; 40(4):680-697. doi: [10.1007/s00261-014-0305-8](https://doi.org/10.1007/s00261-014-0305-8).

Gensheimer M, Hawkins D, Ermoian R, Trister A. **Assessing the Scale of Tumor Heterogeneity by Complete Hierarchical Segmentation of MRI.** *Physics in Medicine & Biology*. 2015; (60):977-993. doi:10.1088/0031-9155/60/3/977; [Link to article](#)

Giger M. **Future Perspectives: CAD to Quantitative Imaging Biomarkers, Phenotypes, and Imaging Genomics.** *Computer-Aided detection and diagnosis in medical imaging*. Mar 2015, 409-416.

Hristova I, Boellaard R, Vogel W, et al. **Retrospective Quality Control Review of FDG Scans in the Imaging Sub-Study of PALETTE EORTC 62072/VEG110727: a Randomized, Double-Blind, Placebo-Controlled Phase III Trial.** *European Journal of Nuclear Medicine and Molecular Imaging*. 2015; 42(6):848-857. doi: 10.1007/s00259-015-3002-0; [Link to article](#)

Kanazawa, Y, Hayashi H, Harada M. **Clinical Approach of T1 Mapping for Hemodynamic Analysis.** *Medical Imaging and Information Sciences*. 2015; 32(4):26-29. doi: 10.11318/mii.32.xxvi.

Kim SY, Park SH. **Reply to What is the Role of Diffusion-Weighted Imaging in Ileocolonic Crohn's Disease?** *Inflammatory Bowel Diseases*. Jun 2015; 21(6):E9-E10. doi: 10.1097/MIB.0000000000000414.

Lee Y, Lee SS, Kim N, et al. **Intravoxel Incoherent Motion Diffusion-Weighted MR Imaging of the Liver: Effect of Triggering Methods on Regional Variability and Measurement Repeatability of Quantitative Parameters.** *Radiology*. 2015 Feb; 274(2):405-15. doi: 10.1148/radiol.14140759.

Levy E, **Noncirrhotic Portal Hypertension: Imaging, Hemodynamics, and Endovascular Therapy.** *Clinical Liver Disease*. 2015; 6(3):67-71. doi: 10.1002/cld.496

Li Q, Gavrielides MA, Zeng R, Myers KJ, Sahiner B, Petrick N. **Factors Affecting Uncertainty in Lung Nodule Volume Estimation with CT: Comparisons of Findings from Two Estimation Methods in a Phantom Study.** *Medical Imaging*. Mar 2015: Computer-Aided Diagnosis, Conference Volume 9414. doi: 10.1117/12.2081489

Li Q, Gavrielides MA, Sahiner B, Myers KJ, Zeng R, Petrick N. **Statistical Analysis of Lung Nodule Volume Measurements with CT in a Large-Scale Phantom Study.** *Med. Phys.* 2015; 42(7):3932-3947. <http://dx.doi.org/10.1118/1.4921734>; [Link to article](#)

Lin C, Bradshaw T, Perk T, et al. **Repeatability and Reproducibility of 18F-NaF PET Quantitative Imaging Biomarkers.** *NCCAAPM, University of Wisconsin-Madison*. 2015 Oct.

Mankoff DA, et al. **How Imaging Can Impact Clinical Trial Design: Molecular Imaging as a Biomarker for Targeted Cancer Therapy.** *Cancer*. 2015 May-Jun; 21(3):218-24. doi: 10.1097/PPO.0000000000000116.

McNitt-Gray MF, Kim GH, Zhao B, et al. **Determining the Variability of Lesion Size Measurements from CT Patient Data Sets Acquired under "No Change" Conditions.** *Translational Oncology*. 2015; 8(1):55-64. doi: 10.1016/j.tranon.2015.01.001.

Miyazaki K, Jerome NP, Collins DJ, et al. **Demonstration of the Reproducibility of Free-Breathing Diffusion-Weighted MRI and Dynamic Contrast Enhanced MRI in Children with Solid Tumours: a Pilot Study.** *European Radiology*. 2015 E-published ahead of print. <http://dx.doi.org/10.1007/s00330-015-3666-7>. [PubMed Citation](#)

Mulshine JL, Avila R, Yankelevitz D, et al. **Lung Cancer Workshop XI: Tobacco-Induced Disease: Advances in Policy, Early Detection, and Management.** *Journal of Thoracic Oncology*. May 2015; 10(5):762-767. doi: 10.1097/JTO.0000000000000489.

Newell JD, Fuld MK, Allmendinger T, et al. **Very Low-Dose (0.15 mGy) Chest CT Protocols Using the COPDGene 2 Test Object and a Third-Generation Dual-Source CT Scanner With Corresponding Third-Generation Iterative Reconstruction Software.** *Investigative Radiology*. 2015; 50(1):40-45. doi: 10.1097/RLI.0000000000000093.

Obuchowski NA and Gazelle GS. **Handbook for Clinical Trials of Imaging and Image-Guided Interventions.** John Wiley & Sons, 2015.

Oubel E, Bonnard E, Sueoka-Aragane, N, et al. **Volume-Based Response Evaluation with Consensual Lesion Selection: A Pilot Study by Using Cloud Solutions and Comparison to RECIST 1.1.** *Academic Radiology.* 2015; 22(2):217-225. doi: [10.1016/j.acra.2014.09.008](https://doi.org/10.1016/j.acra.2014.09.008).

Peters J, Leal J, Subramaniam R. **The QIBA Profile: Are We Adhering to Recommendations Stated Regarding Blood Glucose Values and Radiotracer Uptake Times?** *Journal of Nuclear Medicine.* 2015; 56(supplement 3):2603. [Link to article](#)

Pierce LA, Elston BF, Clunie DA, Nelson D, Kinahan PE. **A Digital Reference Object to Analyze Calculation Accuracy of PET Standardized Uptake Value.** *Radiology.* 2015 May. [PubMed Citation](#)

Prah MA, Stufflebeam SM, Paulson ES, Kalpathy-Cramer J, Gerstner ER, Batchelor TT, Barboriak DP, Rosen BR, Schmainda KM. **Repeatability of Standardized and Normalized Relative CBV in Patients with Newly Diagnosed Glioblastoma.** *AJNR Am. J. Neuroradiol.* 2015 June. [Published online before print as 10.3174/ajnr.A4374. PubMed Citation.](#)

Quarantelli M. **MRI/MRS in Neuro-inflammation: Methodology and Applications.** *Clin Transl Imaging.* DOI [10.1007/s40336-015-0142-y2015](https://doi.org/10.1007/s40336-015-0142-y2015); [Link to article](#)

Rosenthal, MH, et al. **CT Predictors of Overall Survival at Initial Diagnosis in Patients with Stage IV Colorectal Cancer.** *Abdom Imaging.* 2015 Jun; 40(5):1170-6. doi: [10.1007/s00261-014-0272-0](https://doi.org/10.1007/s00261-014-0272-0).

Rosenkrantz AB, et al. **Clinical Utility of Quantitative Imaging.** *Acad Radiol.* 2015 Jan; 22(1):33-49. doi: [10.1016/j.acra.2014.08.011](https://doi.org/10.1016/j.acra.2014.08.011). Epub 2014 Oct 22.

Salem A, O'Connor JPB. **Assessment of Tumor Angiogenesis: Dynamic Contrast-Enhanced MR Imaging and Beyond.** *Magn Reson Imaging Clin N Am.* 2015. <http://dx.doi.org/10.1016/j.mric.2015.08.020>

Shiina T, Nightingale KR, Palmeri ML, Hall TJ, et al. **WFUMB Guidelines and Recommendations for Clinical Use of Ultrasound Elastography: Part 1: Basic Principles and Terminology.** *Ultrasound Med. Biol.* 2015;41(5), 1126-1147. [PubMed Citation.](#) [Link to article.](#)

Silver M. **Cardiovascular and Neurovascular Imaging: Physics and Technology.** *Chapter 5: Physics and Technology of CT Angiography.* August 2015: page 60. ISBN-13: 978-1439890561. [Link to chapter](#)

Solomon J, Mileto A, Nelson R, et al. **Quantitative Features of Liver Lesions, Lung Nodules, and Renal Stones at Multi-Detector Row CT Examinations: Dependency on Radiation Dose and Reconstruction Algorithm.** *Radiology.* December 2015. Epub ahead of print. <http://dx.doi.org/10.1148/radiol.2015150892>

Sunderland, J, Christian, P. **Quantitative PET/CT Scanner Performance Characterization Based upon the Society of Nuclear Medicine and Molecular Imaging Clinical Trials Network Oncology Clinical Simulator Phantom.** *Journal of Nuclear Medicine.* 2015. 56:145-152. doi: [10.2967/jnumed.114.148056](https://doi.org/10.2967/jnumed.114.148056); [Link to article](#)

Tagliafico A, Bianca B, Tagliafico G, et al. **Quantitative Evaluation of Background Parenchymal Enhancement (BPE) on Breast MRI. A Feasibility Study with a Semi-Automatic and Automatic Software Compared to Observer-Based Scores.** *British Journal of Radiology.* October 2015 (published online) <http://dx.doi.org/10.1259/bjr.20150417>

Wang H, Su Z, Ye Huiyi, et al. **Reproducibility of Dynamic Contrast-Enhanced MRI in Renal Cell Carcinoma: A Prospective Analysis on Intra- and Inter-Observer and Scan-Rescan Performance of Pharmacokinetic Parameters.** *Medicine.* September 2015; 94(37):1529. doi: [10.1097/MD.0000000000001529](https://doi.org/10.1097/MD.0000000000001529); [Link to article](#)

Yasar T, et al. **Interplatform Reproducibility of Liver and Spleen Stiffness Measured with MR Elastography.** *Journal of Magnetic Resonance Imaging.* October 2015 (published online). <http://dx.doi.org/10.1002/jmri.25077>



Young S, Kim HJ, Ko MM, Ko WW, Flores C, McNitt-Gray MF. **Variability in CT Lung-Nodule Volumetry: Effects of Dose Reduction and Reconstruction Methods.** *Med Phys.* May 2015; 42(5):2679. doi: 10.1118/1.4918919; [Link to article](#)

## 2014

Abramson RG, Yankeelov TE. **Imaging Biomarkers and Surrogate Endpoints in Oncology Clinical Trials, Chapter 2.** In: *Functional Imaging in Oncology, Biophysical Basis and Technical Approaches.* Volume 1. New York, NY: Springer-Verlag Berlin Heidelberg; 2014: 29-42. [Link to publisher's landing page](#)

Budzik JF, Lefebvre G, Forzy G, El Rafei M, Chechin D, Cotton A. **Study of Proximal Femoral Bone Perfusion with 3D T1 Dynamic Contrast-Enhanced MRI: a Feasibility Study.** *European Radiology.* Dec 2014; 24(12):3217-3223. doi: 10.1007/s00330-014-3340-5.

Chen B, Wilson J, Samei E. **A Refined Methodology for Modeling Volume Quantification Performance in CT.** *Proc. SPIE 9033, Medical Imaging 2014: Physics of Medical Imaging, 903325.* March 19, 2014. <http://dx.doi.org/10.1117/12.2044004>.

Chen B, Christianson O, Wilson J, Samei E. **Assessment of Volumetric Noise and Resolution Performance for Linear and Nonlinear CT Reconstruction Methods.** *Medical Physics* 41, 071909, 2014. [PubMed Citation](#); <http://scitation.aip.org/content/aapm/journal/medphys/41/7/10.1118/1.4881519>

DeVries AF, et al. **Pretreatment Evaluation of Microcirculation by Dynamic Contrast-Enhanced Magnetic Resonance Imaging Predicts Survival in Primary Rectal Cancer Patients.** *International Journal of Radiation Oncology.* Dec 2014; 90(5):1161-1167. <http://dx.doi.org/10.1016/j.ijrobp.2014.07.042>. [PubMed Citation](#)

Dillman JR, Chen S, Davenport MS, Zhao H, Urban MW, et al. **Superficial Ultrasound Shear Wave Speed Measurements in Soft and Hard Elasticity Phantoms: Repeatability and Reproducibility Using Two Ultrasound Systems.** *Pediatric Radiology.* Sept 2014: doi:10.1007/s00247-014-3150-6; [PubMed Citation](#)

Doot RK, Pierce, LA, Byrd D, Elston B, Allberg KC, Kinahan PE. **Biases in Multicenter Longitudinal PET Standardized Uptake Value Measurements.** *Transl Oncol.* Feb 2014; 7(1): 48–54. [Published online Feb 1, 2014]. [PubMed Citation](#)

Ellingson BM, Bendszus M, Sorensen AG, & Pope WB. **Emerging Techniques and Technologies in Brain Tumor Imaging.** *Neuro-Oncology,* 2014:16 (suppl 7), vii12–vii23. doi: 10.1093/neuonc/nou221. [Link to article](#)

Fananapazir G, Bashir MR, Marin D, Boll DT. **Computer-Aided Liver Volumetry: Performance of a Fully-Automated, Prototype Post-Processing Solution for Whole-Organ and Lobar Segmentation Based on MDCT Imaging.** *Abdom Imaging.* 2015 Jun; 40(5):1203-12. doi: 10.1007/s00261-014-0276-9. [PubMed Citation](#)

Ferraioli, G, Parekh P, Levitov AB, and Filice C. **Shear Wave Elastography for Evaluation of Liver Fibrosis.** *J Ultrasound Med.* February 1, 2014; 33(2): 197-203. doi: 10.7863/ultra.33.2.197

Häggström, I. **Quantitative Methods for Tumor Imaging with Dynamic PET.** Doctoral Thesis. Department of Radiation Sciences, Radiation Physics. Umeå University. 2014.

Herskovits EH. **Quantitative Radiology. Applications to Oncology.** *Advances in Cancer Research.* 2014; 124(1):1-30. Available from: 10.1016/B978-0-12-411638-2.00001-X.

Höink AJ, Weßling J, Koch R, et al. **Comparison of Manual and Semi-Automatic Measuring Techniques in MSCT Scans of Patients with Lymphoma: a Multicentre Study.** *European Radiology.* 2014; 24(11):2709-2718. doi: 10.1007/s00330-014-3283-x; [PubMed Citation](#)

Huang W, Li X, Chen Y, et al. **Variations of Dynamic Contrast-Enhanced Magnetic Resonance Imaging in Evaluation of Breast Cancer Therapy Response: A Multicenter Data Analysis Challenge.** *Transl Oncol.* Feb 2014; 7(1): 153–166. [Published online Feb 1, 2014]. [PubMed Citation](#).

Kim SH, Kamaya A, Willmann JK. **CT Perfusion of the Liver: Principles and Applications in Oncology.** *Radiology.* 2014; 272(2):322-344. doi:10.1148/radiol.14130091. [PubMed Citation](#).

Krishnaraj A, Weinreb JC, Ellenbogen PH, Allen Jr B, Norbash A, Kazerooni EA. **The Future of Imaging Biomarkers in Radiologic Practice: Proceedings of the Thirteenth Annual ACR Forum.** *Journal of the American College of Radiology (JACR).* 2014; 11(1):20-23. doi: <http://dx.doi.org/10.1016/j.jacr.2013.08.017>; [PubMed Citation](#)

Litmanovich DE, Hartwick K, Silva M, Bankier AA. **Multidetector Computed Tomographic Imaging in Chronic Obstructive Pulmonary Disease: Emphysema and Airways Assessment.** *Radiologic Clinics of North America.* 2014; 52(1):137–154. doi: <http://dx.doi.org/10.1016/j.rcl.2013.09.002>; [PubMed Citation](#)

Marin D, Pratts-Emanuelli JJ, Mileto A, et al. **Interdependencies of Acquisition, Detection, and Reconstruction Techniques on the Accuracy of Iodine Quantification in Varying Patient Sizes Employing Dual-Energy CT.** *European Radiology.* March 2015; 25(3):679-686. doi: 10.1007/s00330-014-3447-8; [PubMed Citation](#)

Martinez-Rios C, Muzic Jr. Raymond F, DiFillippo, FP, et al. **Artifacts and Diagnostic Pitfalls in Positron Emission Tomography-Magnetic Resonance Imaging.** *Seminars in Roentgenology.* 2014; 49(3):255-270. <http://dx.doi.org/10.1053/j.ro.2014.07.004>.

Moyer BR, Cheruvu NPS, Hu T, Eds. **Chapter 13: Regulatory Considerations Involved in Imaging.** In: *Pharmaco-Imaging in Drug and Biologics Development. Fundamentals and Applications Series: AAPS Advances in the Pharmaceutical Sciences Series.* Vol. 8. New York, NY: AAPS Press, Springer, 2014: 355-390. | ISBN 978-1-4614-8247-5 | doi: 10.1007/978-1-4614-8247-5\_13; [Link to publisher's landing page](#)

Onxley JD, Yoo DS, Muradyan N, et al. **Comprehensive Population-Averaged Arterial Input Function for Dynamic Contrast-Enhanced vMagnetic Resonance Imaging of Head and Neck Cancer.** *International Journal of Radiation Oncology\*Biolog\*Physics.* July 2014; 89(3): 658–665. | doi: 10.1016/j.ijrobp.2014.03.006; [PubMed Citation](#)

Oudry J, Lynch T, Vappou J, Sandrin L, Miette V. **Comparison of Four Different Techniques to Evaluate the Elastic Properties of Phantom in Elastography: Is There a Gold Standard?** *Phys. Med. Biol.* Oct 2014; 59(19):5775-93. doi: 10.1088/0031-9155/59/19/5775; [PubMed Citation](#).

Perrone A, Villetard J, Miller C. **Imaging Review Charters and Operational Considerations.** *Medical Imaging in Clinical Trials.* London: Springer-Verlag, 2014; 65-82. doi: [http://dx.doi.org/10.1007/978-1-84882-710-3\\_4](http://dx.doi.org/10.1007/978-1-84882-710-3_4)

Rosenthal MH, Kim KW, Fuchs CS, et al. **Relationships Between KRAS Mutation Status and Baseline Radiographic Distribution of Disease in Patients with Stage IV Colorectal Cancer.** *Abdominal Imaging.* June 7, 2014. [Epub ahead of print] doi: 10.1007/s00261-014-0165-2; [PubMed Citation](#)

Sanz-Requena R, Prats-Montalbán JM, Martí-Bonmatí L, Alberich-Bayarri A, et al. **Automatic Individual Arterial Input Functions Calculated from PCA Outperform Manual and Population-Averaged Approaches for the Pharmacokinetic Modeling of DCE-MR Images.** *J Magn Reson Imaging.* 2014 Nov 20 epub ahead of print. doi: 10.1002/jmri.24805; [PubMed Citation](#)

Sieren JP, Hoffman EA, Fuld MK, Chan KS, Guo J, & Newell JD. **Sinogram Affirmed Iterative Reconstruction (SAFIRE) Versus Weighted Filtered Back Projection (WFBP) Effects on Quantitative Measure in the COPD Gene 2 Test Object.** *Medical Physics,* 2014: 41(9), 091910. Retrieved from: <http://scitation.aip.org/content/aapm/journal/medphys/41/9/10.1118/1.4893498>

Smith DS, Li X, Arlinghaus LR, Yankeelov TE, Welch EB. **DCEMRI.jl: A Fast, Validated, Open Source Toolkit for Dynamic Contrast Enhanced MRI Analysis.** *PeerJ PrePrints*. 2014. 2:e670v1 Published online 2015 Apr 23. doi: [10.7717/peerj.909](https://doi.org/10.7717/peerj.909). <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4411523/>. PubMed Citation

Song, P, Macdonald MC, Behler RH, et al. **Shear Wave Elastography on the GE LOGIQ E9 with Comb-push Ultrasound Shear Elastography (CUSE) and Time Aligned Sequential Tracking (TAST).** *2014 IEEE International Ultrasonics Symposium*, Vol 1. 1101 – 1104. [Link to journal landing page](#)

Tartare G, Hamad D, Azahaf M, et al. **Spectral Clustering Applied for Dynamic Contrast-Enhanced MR Analysis of Time-Intensity Curves.** *Comput Med Imaging Graph*. 2014 Dec; 38(8):702-13. PubMed Citation.

Yankeelov TE, Abramson RG, Quarles CC. **Quantitative Multimodality Imaging in Cancer Research and Therapy.** *Nat Rev Clin Oncol*. 2014 Nov; (11):670-80. doi: [10.1038/nrclinonc.2014.134](https://doi.org/10.1038/nrclinonc.2014.134); PubMed Citation

Zhao B, Lee SM, Lee HJ, Tan Y, Qi J, Persigehl T, Mozley PD and Schwartz LH. **Variability in Assessing Treatment Response: Metastatic Colorectal Cancer as a Paradigm.** *Clin Cancer Res*. Published Online First on April 29, 2014; doi: [10.1158/1078-0432](https://doi.org/10.1158/1078-0432); PubMed Citation

Zhao H, Chen J, Meixner DD, Xie H, Shamdassani V, Zhou S, Robert JL, Urban MW, Sanchez W, Callstrom MR, Ehman RL, Greenleaf JF, Chen S. **Noninvasive Assessment of Liver Fibrosis Using Ultrasound-based Shear Wave Measurement and Comparison to Magnetic Resonance Elastography.** *J Ultrasound Med*. 2014 Sep; 33(9):1597-604. doi: [10.7863/ultra.33.9.1597](https://doi.org/10.7863/ultra.33.9.1597); PubMed Citation

## 2013

Andriantsimiavona R, Grimm S, Hatzakis H. **Harnessing the Global Brain in Medical Imaging: 3DnetMedical, Network-Centric Innovation in the Cloud—Our Experience.** The Authors and Future Technology Press 2013; In Impact: *The Journal of Innovation Impact*. 13-009:5(1):96–103. [Public Access article link](#)

Aronhime S, Calcagno C, Jajamovich GH, et al. **DCE-MRI of the Liver: Effect of Linear and Nonlinear Conversions on Hepatic Perfusion Quantification and Reproducibility.** *J Magn Reson Imaging*. 2013; 1522-2586. doi: [10.1002/jmri.24341](https://doi.org/10.1002/jmri.24341); [Link to journal landing page](#)

Buckler AJ, Paik D, Ouellette M, Danagouljian J, et al. **A Novel Knowledge Representation Framework for the Statistical Validation of Quantitative Imaging Biomarkers.** *J Digit Imaging*. 2013; 26:614–629. doi: [10.1007/s10278-013-9598-3](https://doi.org/10.1007/s10278-013-9598-3); PubMed Citation

Buckler AJ, Ouellette M, Danagouljian J, et al. **Quantitative Imaging Biomarker Ontology (QIBO) for Knowledge Representation of Biomedical Imaging Biomarkers.** *J Digit Imaging*. 2013; 26:630–641. doi: [10.1007/s10278-013-9599-2](https://doi.org/10.1007/s10278-013-9599-2); PubMed Citation

Coxson HO. **Sources of Variation in Quantitative Computed Tomography of the Lung.** *J Thorac Imaging*. Sept 2013; 28(5):272-9. doi: [10.1097/RTI.0b013e31829efbe9](https://doi.org/10.1097/RTI.0b013e31829efbe9); PubMed Citation

Curran BH, Starkschall G, Siochi RAC, eds. **Informatics in Radiation Oncology.** Series: *Imaging in Medical Diagnosis and Therapy*; Florida: CRC Press, 2013; 329 pages.

Gómez-Cenzano P, Pino-Sorroche F. **Standardization and Quantification in FDG-PET/CT Imaging for Staging and Restaging of Malignant Disease.** *PET Clinics*. [Available online 4 December 2013, ISSN 1556-8598]. doi: <http://dx.doi.org/10.1016/j.cpet.2013.10.003>; [Link to Science Direct](#)

Heye T, Boll DT, Reiner CS, et al. **Impact of Precontrast T10 Relaxation Times on Dynamic Contrast-Enhanced MRI Pharmacokinetic Parameters: T10 Mapping Versus a Fixed T10 Reference Value.** *J Magn Reson Imaging.* Oct 29, 2013. doi: [10.1002/jmri.24262](https://doi.org/10.1002/jmri.24262); [Link to journal](#)

Jain R. **Measurements of Tumor Vascular Leakiness Using DCE in Brain Tumors: Clinical Applications.** *NMR in Biomedicine.* 2013; 26(8): 1042–1049. doi: [10.1002/nbm.2994](https://doi.org/10.1002/nbm.2994); [PubMed Citation](#)

Kim N, Choi J, Yi J, et al. **An Engineering View on Megatrends in Radiology: Digitization to Quantitative Tools of Medicine.** *Korean J Radiol.* Mar-Apr 2013; 14(2):139-153. doi: <http://dx.doi.org/10.3348/kjr.2013.14.2.139>; [PubMed Citation](#)

Kurland BF, Doot RK, Linden HM, Mankoff DA, Kinahan PE. **Multicenter Trials Using 18F-Fluorodeoxyglucose (FDG) PET to Predict Chemotherapy Response: Effects of Differential Measurement Error and Bias on Power Calculations for Unselected and Enrichment Designs.** *Clin Trials.* Oct 29, 2013; 10(5). doi: [10.1177/1740774513506618](https://doi.org/10.1177/1740774513506618). [Epub ahead of print] [PubMed Citation](#)

Ortuño JE, Ledesma-Carbayo MJ, Simões RV, et al. **DCE@urLAB: a Dynamic Contrast-Enhanced MRI Pharmacokinetic Analysis Tool for Preclinical Data.** *BMC Bioinformatics.* 2013; 14:316. doi: [10.1186/1471-2105-14-316](https://doi.org/10.1186/1471-2105-14-316). [Public Access article link](#); [PubMed Citation](#)

Newell JD, Sieren J, Hoffman EA. **Development of Quantitative CT Lung Protocols.** *Journal of Thoracic Imaging.* 2013; 28(5): doi:[10.1097/RTI.0b013e31829f6796](https://doi.org/10.1097/RTI.0b013e31829f6796).

Petrella, JR. **Neuroimaging and the Search for a Cure for Alzheimer's Disease.** *Radiology.* 2013; (269)3:671-691. doi: [10.1148/radiol.13122503](https://doi.org/10.1148/radiol.13122503). [PubMed Citation](#)

## 2012

Sieren JP, et al. **Reference Standard and Statistical Model for Inter-site and Temporal Comparisons of CT Attenuation in a Multicenter Quantitative Lung Study.** *Medical Physics* 39.9 (2012): 5757–5767. *PMC.* Web. 25 Mar. 2015. doi: [10.1118/1.4747342](https://doi.org/10.1118/1.4747342). [PubMed Citation](#)

Taylor J. **Meeting Report: Radiological Society of North America (RSNA) Annual Meeting 2012.** *SCOPE: Institute of Physics and Engineering in Medicine.* June 2013; 22(2): 42-44. [Public Access article](#)

## 2011

Wang YXJ, Ng CK. **The Impact of Quantitative Imaging in Medicine and Surgery: Charting our Course for the Future.** *Quant Imaging Med Surg.* 2011; 1:1-3. doi: [10.3978/j.issn.2223-4292.2011.09.01](https://doi.org/10.3978/j.issn.2223-4292.2011.09.01); [PubMed citation](#)

## 2010

Boellaard R, O'Doherty MJ, Weber WA, et al. **FDG PET and PET/CT: EANM Procedure Guidelines for Tumour PET Imaging: Version 1.0.** *Eur J Nucl Med Mol Imaging* 2010; 37:181-200. DOI [10.1007/s00259-009-1297-4](https://doi.org/10.1007/s00259-009-1297-4); [Link to article](#)

Doot RK, Scheuermann JS, Christian PE, Karp JS, Kinahan PE. **Instrumentation Factors Affecting Variance and Bias of Quantifying Tracer Uptake with PET/CT.** *Med. Phys.* 2010; 37(11):6035. [PubMed Citation](#)

Namati E, Thiesse J, Sieren JC, Ross A, Hoffman EA, et al. **Longitudinal Assessment of Lung Cancer Progression in the Mouse using In Vivo Micro-CT Imaging.** *Medical Physics,* 2010: 37(9), 4793–4805. doi: [10.1118/1.3476454](https://doi.org/10.1118/1.3476454)

## 2009

Mulshine JL, Jablons DM. **Volume CT for Diagnosis of Nodules Found in Lung-Cancer Screening.** *N Engl J Med.* Dec 3, 2009; 361(23): 2281-2. [PubMed Citation](#); [Link to Article](#)